

REMARKS

In view of the foregoing amendments and the following remarks, reconsideration and further examination are requested. Claims 1-32, 34, 37 and 38 are pending in this application prior to entry of amendments submitted herewith. By amendment herewith, entry of which is requested, Claims 1-4, 6-9, 20 and 34 are being changed, Claim 5 is being cancelled, and new claims 39-42 are being added. After entry of these amendments, Claims 1-4, 6-32, 34 and 37-42 will be pending in the application.

Claim 1 has been amended to clarify a difference between characters, which represent individually machine readable values of the claimed pictographic or bar code, and the constituent components of which those characters are comprised. Claim 1 now recites that a bar or pictographic code comprises multiple characters, each of which has a machine readable value and comprises multiple portions, and wherein at least one of the characters is a changeable character, the value of which is changeable from an original value to a modified value in response to a stimulus. Importantly, the value of the changeable character is made through a change to one or more of the components of the character from an original state to a modified state in response to the stimulus and both the original value and the modified value of the changeable character are machine readable. An understanding of these aspects of Claim 1 is important, and reference is made to the application specification and drawings in that regard.

Figure 1 of the application and the accompanying discussion in the specification at page 8, line 9 through page 9, line 8 show the character structures of three different types of example code that may be used in bar codes (EAN 8 format, Types A, B and C), in which each character of the bar code represents a numerical digit, and each character is made up of a series of seven bars, each of which bars appears as a darker foreground color or a lighter background color to indicate the binary states of each bar. For each code type, there are ten different specific foreground/background arrangements for the seven bars of a character that associate the character with a different one of the ten digits from 0 to 9. Using a color changing substance for one or more of the bars of a character, the binary state of the bars can be changed with a change between background and foreground colors to change the value of the character from an original digit value to certain other modified digit values. However, for the changed character to have a machine

readable value, it must conform to a recognized pattern of foreground and background colors for the seven bars. A different pattern would not be readable by a bar code reader, because it would not be recognized as being associated with a digit value that replaces the original digit value of the character.

Further reference is made to Figures 2a-2c and accompanying specification text at page 9, lines 11-19 which show an example of a bar code character having portions (the two bars identified in the different figures with reference numerals 36, 37 or 38) that change color in response to a stimulus to change the value of the character from "3" when those portions have a background color (Figure 2b) to a value of "5" when those portions are changed to a foreground color (Figure 2c). Also, as noted in the specification at page 9, lines 9-10, more complex changes to values may be made using more than one color changing substance. Such an example is shown in Figure 3 and the accompanying specification text at page 9, lines 20-26 where one character of a bar code is changeable between three different digit values (1, 3 or 5) and another character is changeable between two different digit values (1 and 3), as a result of different stimuli or combinations of stimuli through the use of different color changing substances for different constituent bars of that character. In this way the bar code can read as "1234 3331", "1234 1511" or "1234 5311", depending upon the circumstances of the stimuli. Notably, all of the changed characters of the bar code of Figure 3 remain individually machine readable in all three situations, because each of their patterns always corresponds with a pattern recognized as representing one of the digits 1, 3 or 5. As another example from the application, Figures 5a-5c and the accompanying specification text at page 12, lines 1-28 show a bar code having two changeable characters that change values based on a change of portions of the characters between background and foreground colors based on a change in temperature as a stimulus. In the specific example shown in Figures 5a-5c, one character changes from a "3" to a "5" and another character changes from a "3" to a "1", so that the machine readable information of the bar code changes from "1234 3331" to "1234 5311" in response to the stimulus.

Another example in the application, involving alphabetic characters, is disclosed at page 4, lines 1-12 of the specification, where an alphabetic character can be made changeable between different recognized values. The example shown is to use color-

changing ink for portions of the character so that the character can change between the different alphabetic values of the letters "I", "P" and "B" in response to stimuli.

The attribute of the changeable characters recited in Claim 1 to have machine readable values before and after the change in response to a stimulus is an important feature of the claimed subject matter.

Consistent with the discussion, Claim 3 has been amended to recite that the code is a bar code and that each of the characters comprises a series of bars and that the original value and the modified value of a changeable character are different digits, Claim 4 has been amended to recite that the code is a pictographic code with alpha-numeric characters, and new Claims 40-42 recite that the code is a bar code and that the original and modified values of a changeable character are different numbers selected from a specified group of numbers from 0 to 9. New Claim 42 also requires that the modified value is indicative of the presence of a product feature for which a higher sale price is chargeable for sale of the product, which subject matter is discussed in the specification, *inter alia*, at page 12, lines 25-29. New Claim 39 simply provides a claim to a container having an identifier according to Claim 3, which parallels the container of Claim 38 in relation to the identifier of Claim 1. Minor textual corrections and changes for consistency have been made to other claims. These claim amendments introduce no new matter.

Rejection Under 35 U.S.C. § 102(e), Goldsmith et al.

The Examiner has rejected Claims 1-25 and 34-38 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,190,610 by Goldsmith et al. The rejection is traversed. It is noted that Claims 35 and 36, included within the Examiner's recitation of rejected claims, were cancelled prior to issuance of the Examiner's rejection, and those claims are, therefore, not currently at issue.

It appears as though the Examiner has taken a broad view of the scope of the term "component" in the claims. In particular, it appears that the Examiner may consider this term to cover an entire bar code, and has specifically referred to Figure 9 of Goldsmith.

It is submitted, however, that Goldsmith et al. teaches a bar code identifier that is modifiable between a first state, in which the bar code is machine readable, to a second state in which the bar code is rendered defective, and not machine readable. Moreover,

the portion of the bar code of Goldsmith et al. that is disclosed as being changed to effect the change in the bar code does not effect a change in a character from one machine readable value to another.

Thus, the subject matter as recited in Claim 1 is significantly different than the disclosure of Goldsmith et al. Goldsmith et al. are concerned with an indicator that indicates when a food product has become contaminated. [Abstract; column 2, lines 18-32; column 3, lines 16-20]. In a machine-readable context, Goldsmith et al. disclose an indicator that includes a bar code that is initially machine readable and that is rendered defective and thus not machine readable when the product becomes contaminated. Moreover, Goldsmith et al. do not disclose a bar code that has changeable characters that change from one machine readable value to another machine readable value in response to a stimulus. Rather, changes to the bar code in Goldsmith et al. are designed to obliterate or otherwise alter the bar code to render the bar code defective and to prevent the bar code from being read. Although Goldsmith et al. do refer to an altered bar code being "detectable" by the bar code reader [for example, at column 5, lines 58-63], the clear implication from the disclosure of Goldsmith et al. is that such "detectability" of the bar code is only in the sense that the bar code reader can either read the bar code or not read the bar code because the bar code has "detected" that the bar code is defective.

For example, in Figures in 7, 8, 9, 10A and 10B, Goldsmith et al. disclose a bar code formed by two substrate components, which together initially form a machine readable bar code. On an underlying substrate 28 there appears an indicator element 27, which is aligned with a window cut-out 33 in the second, overlying substrate 32 which has printed thereon bars 31. The combination of the element 27 and the bars 31 forms a machine readable bar code in the initial situation when food contamination has not occurred [column 7, lines 1-7]. However, when the food becomes contaminated, the indicator element 27 is caused to be removed, which renders the bar code "defective" to the bar code reader [column 7, lines 7-12], thereby destroying the machine readability of the bar code. In another embodiment of Goldsmith et al. shown in Figures 11 and 12, contaminants cause the background to an initially machine readable bar code to change from clear to a dark color that prevents the bar code from being distinguished from the background, rendering the bar code unreadable. [Column 9, lines 24-36.]. In Figures 15 and 16, Goldsmith et al.

show a two bar code detector system having a contamination indicator area 56, which overlaps with both of the bar codes. In the initial situation when the food is not contaminated [Figure 15], one of the bar codes (product identification bar code 52) is readable by a bar code reader and the second bar code (contamination detecting bar code 54) is not readable. [Column 10, lines 26-28.] When the food becomes contaminated, the contamination indicator area 56 changes color (Figure 16) so that the product identification bar code 52 is rendered unreadable and the contamination detecting bar code 54 is rendered readable. [Column 10, lines 28-36 and lines 59-62.] As an alternative for the embodiment of Figures 15 and 16, Goldsmith et al. disclose that instead of dark bars appearing in the indicator area 56, as shown in Figures 15 and 16, the indicator area 56 could be configured so that bars instead disappear in the indicator area 56, but again with a result being that the change in the indicator area 56 renders the product identification bar code 52 unreadable while rendering the contamination detecting bar code 54 readable. [Column 11, lines 11-17.] Again, the basic concept of Goldsmith et al. is to alter a bar code so as to change the entire bar code from readable to unreadable (product identification bar code 52) or vice versa (contamination detecting bar code 54). Goldsmith et al. do not disclose changing a character of a bar code so that the character maintains a machine readable value before and after the change.

In particular, Goldsmith et al. do not disclose a bar code containing a changeable character with a value that is changeable from an original, machine readable value to a modified, machine readable value through a change of a component of the character from an original state to a modified state in response to a stimulus. It is apparent that Claim 1 is not anticipated by or obvious over Goldsmith et al. Each rejected dependent claim includes all of the limitations of Claim 1 and are also not anticipated by or obvious over Goldsmith et al. Moreover, each of the dependent claims recites one or more additional features to further distinguish over Goldsmith et al. For example, Claim 3 requires a bar code with the characters each comprises a series of bars representing a digit, and requires that the machine readable original and modified values of each changeable character are different digits, which further distinguishes the disclosure of Goldsmith et al. Likewise, new claims 40-42 require a bar code in which the machine readable original and modified values of a changeable character are different numbers selected from an identified group

of from 0 to 9, and with Claim 41 requiring at least two such changeable characters. Again, Goldsmith et al. do not disclose such a change to the machine readable value of a character of a bar code, but rather Goldsmith et al. disclose changing a bar code to render it either unreadable or readable.

The rejection based on Goldsmith et al. should be withdrawn.

Rejection Under 35 U.S.C. § 103(a), Goldsmith et al. and King et al.

The Examiner has rejected Claims 26-31 under 35 U.S.C. 103(a) as being unpatentable over Goldsmith et al. in view of U.S. Patent No. 7,098,850 by King et al. The rejection is traversed.

As discussed above, Claim 1 and claims dependent under Claim 1 are not anticipated by or obvious over Goldsmith et al. The disclosure of King et al. does not bridge the teaching gap of Goldsmith et al. King et al.

King et al. discuss a wireless communication device comprising an antenna, a wireless communication chip, and a substrate. The antenna is for wireless communication with a remote interrogation. [Abstract; column 2, lines 19-25.] King et al. do not disclose identifiers including bar or pictographic codes, and accordingly cannot bridge the teaching gap of Goldsmith et al. with relation to Claim 1, let alone with respect to Claims 26-31.

The rejection based on Goldsmith et al. in view of King et al. should be withdrawn.

Rejection Under 35 U.S.C. § 103(a), Goldsmith et al. and Zhan

The Examiner has rejected Claim 32 under 35 U.S.C. 103(a) as being unpatentable over Goldsmith et al. in view of DE 4303035 by Zhan. The rejection is traversed.

As discussed above, Claim 1 and claims dependent under Claim 1 are not anticipated by or obvious over Goldsmith et al. The disclosure of Zhan does not bridge the teaching gap of Goldsmith et al. King et al.

The Examiner notes that Zahn discloses an identifier formed by applying a light colored material over a dark colored surface such that gaps in the light colored material form a machine readable code. But Zahn does not disclose an indicator with a bar or pictographic code with the features recited in Claim 1, and provides no teaching to bridge the teaching gap of Goldsmith et al.


The rejection based on Zhan should be withdrawn.

It is believed that all of the issues raised in the January 28, 2008 office action are addressed herein, and that all claims are in condition for allowance and allowance is respectfully requested. In the event that a telephone conversation would further prosecution or expedite allowance, the Examiner is invited to contact the undersigned at the telephone number provided below.

Respectfully submitted,

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